

by anthropologists as *acrocephaly*, a deformity also in Man associated with the premature consolidation of the same sutures as those affected in the present specimen, and which, it is supposed, has influenced the form of the cranial bones. We have here, then, in all probability, not a case of specific or even racial distinction, but one of individual variation due to pathological changes at an early period of development.

Acrocephaly of a precisely similar type occurs sporadically in men of all races. The Museum of the Royal College of Surgeons possesses good examples of it in a West-African Negro, an Arab, a Polynesian, and an Englishman; but as I believe it has not hitherto been observed in any of the Anthropoid Apes, the present specimen is one of great interest.

The following papers were read:—

1. Supplementary Notes on the Anatomy of the Chinese Water-Deer (*Hydropotes inermis*). By W. A. FORBES, B.A., Prosector to the Society.

[Received July 18, 1882.]

An adult male of this curious Deer having lately passed through my hands, it may be advisable to record my notes on certain of its soft parts, on the condition of which the late Prof. Garrod laid considerable stress in the classification of the Ruminants, but some of which were, I believe, unknown to him, the specimen of *Hydropotes* described by him¹ having been a young (in fact still-born) example of the opposite sex.

As regards the male organs of generation, the *glans penis* is an elongated tapering compressed cone, with the urethral opening subterminal, thus closely resembling those of *Capreolus*, *Cervulus*, and *Elaphodus*. There are no traces of Cowper's glands, as is also the case in the first and last of the three genera just named. In these respects, then, *Hydropotes* resembles most closely *Capreolus* and *Elaphodus*, and differs from the Rusine Deer, with which, according to the views of Sir Victor Brooke at one time², in part indorsed by Garrod³, it was supposed to have perhaps its closest relations. The large "rusiform" Spigelian liver-lobe, which was found by the last-named anatomist in the young of *Hydropotes*, and the presence of which he adduced as supporting those views, is, however, quite absent in the liver of the present specimen. There is a similarly situated "spurious cystic fossa," containing, however, no gall-bladder, only a minute almost atrophied cord, of apparently vascular nature. The caudate lobe is well developed.

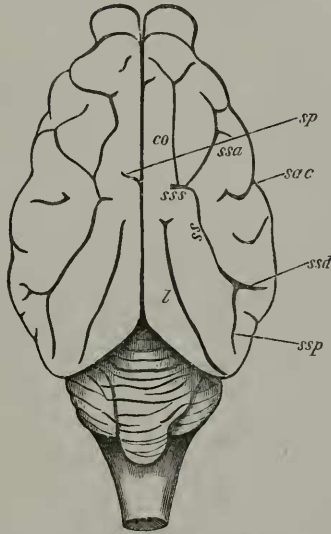
In the rumen of the stomach the villi, where best developed, are pretty uniformly filiform, slightly flattened, but not clavate. The

¹ Cf. P. Z. S. 1877, p. 789, and Coll. Papers, pp. 422-425.

² P. Z. S. 1872, p. 525.

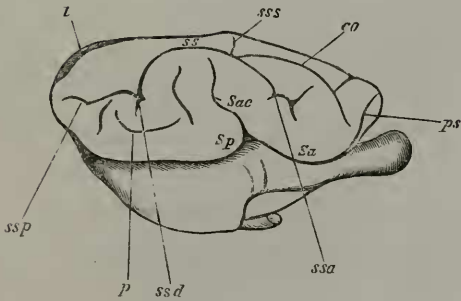
³ Coll. Pap. p. 425.

Fig. 1.



Upper surface of brain of Chinese Water-Deer

Fig. 2.



Side view of brain of Chinese Water-Deer.

reticulum-cells are rather shallow. The psalterium has, as I count, nine primary laminae, and is quadruplicate.

The length of the intestines in the present specimen (the body of which had a total length of 33 inches, including the three-inch-long tail) was 29 feet 2 inches, 21 feet 7 inches being small intestine, the remainder (7 feet 7 inches) colon and rectum. The relative lengths, therefore, of these parts were not very different from those that obtained in the younger individual already described. The caecum was three inches long. There were $2\frac{1}{2}$ coils in the colic spiral; and at the junction of the ileum and caecum is a distinct glandular patch, like a largish "Peyer's patch," though not having the complex structure of the ileo-caecal gland met with in *Moschus*, *Cervus*, *Camelopardalis*, &c.

The only figure hitherto extant (that given by Prof. Garrod in his paper already quoted) of the brain of *Hydropotes* having been taken from a very young specimen, it may be worth while to give figures of the superior and lateral aspects of that removed from this adult specimen, which will be useful for comparison with Garrod's earlier one, as well as with those given by that author and Prof. Flower of the brain in *Elaphodus*, *Moschus*, and *Pudua*, and with the series of semidiagrammatic sketches illustrating Dr. Krueg's valuable paper on the cerebral convolutions of the Ungulata generally¹, whose nomenclature on the subject I have also adopted.

In its cerebral organization *Hydropotes* approaches the genus *Capreolus* more nearly than any other Cervine form known to me, the similarity of the two being obvious on comparison of the figures now exhibited (see p. 637) with those of Leuret and Gratiolet² and of Krueg³ of the Roe. From *Elaphodus* and *Pudua* these two forms differ in the entire disappearance (save very slightly anteriorly) of the callosomarginal ("splenial") sulcus from the superior aspect of the hemispheres, owing to the greater "pronation" of their brain generally.

Sir Victor Brooke has been led, from a consideration of other points⁴, to associate *Hydropotes* and *Capreolus* with *Alces*, as a group *per se*, with affinities in some points in the direction of the Old-World (Plesiometacarpal), in others in that of the New-World (Idiometacarpal) forms. It appears to me that the additional evidence in this paper, especially that derived from the resemblance of the generative organs, is strongly in favour of this association, so far, at least, as *Hydropotes* and *Capreolus* are concerned. The general similarity in *facies* of *Capreolus* to *Hydropotes* has often struck me, and has even, I believe, led others into the error of mistaking one for the other!

That *Hydropotes* is in no way intimately related to *Moschus* was already amply demonstrated; and the latter form also differs, as we now know, in the conformation of its glans penis and in the possession of Cowper's glands.

¹ Zeitschr. f. wissenschaftl. Zool. xxxi. pp. 297-344. Cf. also Garrod, Coll. Papers, pp. 512-517.

² Anat. Syst. Nerveux, Atlas, pl. x.

³ L. c. pl. xxi.

⁴ P. Z. S. 1878, p. 889.